IN THE CLAIMS

1. **(currently amended)** A communication method in a multicast communication network, including at least one Layer-2 switch ~~sandwiched~~ interposed between two Layer-3 switches, for distributing a multicast packet from a multicast transmitting terminal (source) through at least the Layer-2 switch to a plurality of multicast receiving terminals (receivers), comprising:

forming a receiving terminal discrimination mechanism for discriminating multicast receiving terminals for receiving distribution of said multicast packets by using a discrimination packet, to be transmitted from said multicast receiving terminal to said multicast transmitting terminal when sending an IGMP-JOIN packet, for teaching said Layer-2 switch of the existence of the multicast receiving terminal requesting distribution of said multicast packets under the Layer-2 switch, the discrimination packet includes an IP header and MAC header and wherein the IP source address and MAC source address are an IP address and MAC address of a multicast group to which said multicast receiving terminal belongs; and

distributing multicast packets selectively by said receiving terminal discrimination mechanism only to multicast receiving terminals requesting distribution of said multicast packets when there are multicast receiving terminals relating to such requests under said Layer-2 switches.

2. **(currently amended)** A multicast receiving terminal (receiver) for receiving distribution of multicast packets from a multicast transmitting terminal through at least one Layer-2 switch, ~~sandwiched~~ interposed between two Layer-3 switches,

provided with a discrimination packet transmitting function unit for generating a discrimination packet for teaching said Layer-2 switch of the existence of the multicast receiving terminal requesting distribution of said multicast packets under the Layer-2 switch and transmitting it to said multicast transmitting terminal when sending an IGMP-JOIN packet, the discrimination packet includes an IP header and MAC header and wherein the IP source address and MAC source address are an IP address and MAC address of a multicast group to which said multicast receiving terminal belongs.

3. (canceled)

4. (original) A multicast receiving terminal (receiver) as set forth in claim 2, transmitting said discrimination packet periodically by unicast.

5. **(canceled)**

6. **(currently amended)** A Layer-2 switch, ~~sandwiched~~ interposed between two Layer-3 switches, for relaying a multicast packet transmitted from a multicast transmitting terminal (source) and distributing it to a multicast receiving terminal (receiver), provided with:

a snooping function unit for monitoring for a discrimination packet transmitted from said multicast receiving terminal to said multicast transmitting terminal when sending an IGMP-JOIN packet so as to teach said Layer-2 switch that there is a multicast receiving terminal requesting distribution of said multicast packets existing under the Layer-2 switch, the discrimination packet includes an IP header and MAC header and wherein the IP source

address and MAC source address are an IP address and MAC address of a multicast group to which said multicast receiving terminal belongs; and

a learning function unit for learning the existence of said multicast receiving terminal based on said discrimination packet extracted by said snooping function unit.

7. (canceled)

8. (previously presented) A Layer-2 switch as set forth in claim 6, wherein said learning function unit includes a distribution table, said distribution table learns said IP source address and MAC source address, then multicast packets transmitted from said multicast transmitting terminal (source) are distributed in accordance with said distribution table.

9. **(currently amended)** A Layer-3 switch, ~~sandwiching~~ with at least a Layer-2 switch ~~with~~ interposed between it and another Layer-3 switch, for further relaying multicast packets transmitted from a multicast transmitting terminal (source) through the Layer-2 switch and distributing it to a multicast receiving terminal and for transmitting a discrimination packet, when sending an IGMP-JOIN packet, teaching said Layer-2 switch that there is a multicast receiving terminal (receiver) requesting distribution of said multicast packets existing under the Layer-2 switch to said multicast transmitting terminal, provided with:

a decision function unit for deciding if a received packet is a discrimination packet or a general packet other than a discrimination packet, the discrimination packet includes an IP header and MAC header and wherein the IP source address and MAC source address are an

IP address and MAC address of a multicast group to which said multicast receiving terminal belongs; and

a header processing function unit for processing the MAC header of said received packet and performing different processing in accordance with results of decision of said decision function unit.

10. (canceled)

11. (original) A Layer-3 switch as set forth in claim 9, wherein said header processing function unit does not process the source address of said MAC header when said decision function unit decides that said received packet is a discrimination packet and performs general rewriting processing on said MAC header when it decides that said received packet is a general packet.

12. (previously presented) A Layer-3 switch as set forth in claim 9, wherein said decision function unit decides if said received packet is a discrimination packet or a general packet in accordance with whether said IP header and MAC header of a received packet are a multicast type address or unicast type address.